

Treatment of Distal Radius Fractures

Appropriate Use Criteria

Adapted by: The American Academy of Orthopaedic Surgeons Board of Directors October 18, 2021

Endorsed by:



https://aaos.webauthor.com/go/auc/terms.cfm?actionxm=Terms&auc_id=225050

Disclaimer

Volunteer physicians from multiple medical specialties created and categorized these Appropriate Use Criteria. These Appropriate Use Criteria are not intended to be comprehensive or a fixed protocol, as some patients may require more or less treatment or different means of diagnosis. These Appropriate Use Criteria represent patients and situations that clinicians treating or diagnosing musculoskeletal conditions are most likely to encounter. The clinician's independent medical judgment, given the individual patient's clinical circumstances, should always determine patient care and treatment.

Disclosure Requirement

In accordance with American Academy of Orthopaedic Surgeons (AAOS) policy, all individuals whose names appear as authors or contributors to this document filed a disclosure statement as part of the submission process. All authors provided full disclosure of potential conflicts of interest prior to participation in the development of these Appropriate Use Criteria. Disclosure information for all panel members can be found in Appendix B.

Funding Source

The American Academy of Orthopaedic Surgeons exclusively funded development of these Appropriate Use Criteria. The American Academy of Orthopaedic Surgeons received no funding from outside commercial sources to support the development of these Appropriate Use Criteria.

FDA Clearance

Some drugs or medical devices referenced or described in this document may not have been cleared by the Food and Drug Administration (FDA) or may have been cleared for a specific use only. The FDA has stated that it is the responsibility of the physician to determine the FDA clearance status of each drug or device he or she wishes to use in clinical practice.

Copyright

All rights reserved. Reproduction, storage in a retrieval system, or transmission, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, of any part of this document, requires prior written permission from AAOS.

Published 2021 by the American Academy of Orthopaedic Surgeons (AAOS) 9400 West Higgins Road Rosemont, IL 60018 First Edition Copyright 2020 the American Academy of Orthopaedic Surgeons



For a more user-friendly version of this AUC, or to view additional AUCs, please visit the AAOS AUC web-based app at:

www.OrthoGuidelines.org/auc

To view the clinical practice guideline for this topic, please visit: <u>https://www.orthoguidelines.org/topic?id=1034</u>

Table of Contents

	Writing Panel	. 6
	Voting Panel	. 7
	Contributing Members	. 7
	Voting Panel Moderator	. 8
	AAOS Staff	. 8
I.	INTRODUCTION	. 9
	Overview	. 9
	Interpretting the Appropriateness Rating	10
	Incidence	10
	Etiology	10
	Potential Benefits, Harms, and Contraindications	10
II	. METHODS	11
	Developing Criteria	11
	Formulating Indications and Scenarios	12
	Figure 1. Developing Criteria	12
	Creating Definitions and Assumptions	13
	Literature Review	13
	Voting Panel Modifications to Writing Panel Document	13
	Determining Appropriateness	14
	Voting Panel	14
	Rating Appropriateness	14
	Figure 2. Interpreting the 9-Point Appropriateness Scale	14
	Round One Voting	15
	Round Two Voting	15
	Final Ratings	15
	Figure 3. Defining Agreement and Disagreement for Appropriateness Ratings	16
	Figure 4. Interpreting Final Ratings of Criteria	16
	Revision Plans	17
	Disseminating Appropriate Use Criteria	17
	Patient Indications and Treatments	18
	Assumptions	18
	Indications	19
	Treatments	19

III. RESULTS OF APPROPRIATENESS RATINGS	
Results	
Figure 5. Breakdown of Appropriateness Ratings	
Figure 6. Breakdown of Agreement amongst Voting Panel	
Figure 7. Distribution of Appropriateness on 9-Point Rating Sca	lle 23
Voting Results by Scenario	
IV. APPENDICES	
Appendix A. Documentation of Approval	
Appendix B. Disclosure Information	
DRF Writing Panel Member Disclosures	
DRF Voting Panel Member Disclosures	
Appendix C. References	
Appendix D. External Endorsements	

Writing Panel

- 1. **David Ring, MD, FAAOS** American Society for Surgery of the Hand
- 2. Nancy Naughton, OTD, OTR/L, CHT American Society of Hand Therapists
- 3. Kristin Valdes, OTD, OT, CHT American Society of Hand Therapists
- 4. Manijeh Berenji, MD, MPH, FACOEM American College of Occupational & Environmental Medicine
- 5. Yusef Sayeed, MD, MPH, MEng American College of Occupational & Environmental Medicine
- 6. Jason Strelzow, MD, FAAOS Orthopaedic Trauma Association
- 7. Gregory Della Rocca, MD, PhD, FAAOS, FACS Orthopaedic Trauma Association
- 8. **Tom Hughes, MD** American Association for Hand Surgery
- 9. Mihir Desai, MD, FAAOS American Association for Hand Surgery
- 10. Julie Adams, MD, FAAOS American Academy of Orthopaedic Surgeons
- 11. Andrew Nelson, MD, FAAOS American Academy of Orthopaedic Surgeons

Voting Panel

- 1. **Jennifer Waljee, MD, MPH** American Society for Surgery of the Hand
- 2. Jeremy Biggs, MD, MSPH, FACOEM American College of Occupational & Environmental Medicine
- 3. J. Mark Melhorn, MD, FAAOS American College of Occupational & Environmental Medicine
- 4. **Ryan Harrison, MD, FAAOS** Orthopaedic Trauma Association
- 5. **Peter Krause, MD, FAAOS** Orthopaedic Trauma Association
- 6. Warren Hammert, MD American Association for Hand Surgery
- 7. Meredith Osterman, MD, FAAOS American Association for Hand Surgery
- 8. Amy Moore, MD American Society of Plastic Surgeons
- 9. Andrew Chen, MD American Society of Plastic Surgeons

Contributing Members

- 1. Lauren Shapiro, MD American Society for Surgery of the Hand
- 2. Christos Karagiannopoulos MPT, MEd, PhD American Society of Hand Therapists
- 3. Ann Lucado, PT, PhD, CHT American Society of Hand Therapists

Voting Panel Moderator

1. Robin Kamal, MD, FAAOS AAOS Committee on Evidence Based Quality and Value

AAOS Staff

- 1. Jayson Murray, MA, Managing Director, Clinical Quality and Value
- 2. Kaitlyn Sevarino, MBA, CAE, Director, Clinical Quality and Value
- 3. Danielle Schulte, MS, Manager, Clinical Quality and Value
- 4. Nicole Nelson, MPH, Manager, Clinical Quality and Value
- 5. Jennifer Rodriguez, Administrative Assistant, Clinical Quality and Value
- 6. Tyler Verity, Medical Research Librarian, Clinical Quality and Value

I. INTRODUCTION

OVERVIEW

This appropriate use criteria was developed to determine the appropriateness of various treatments in the management of distal radius fracture.

An "appropriate" healthcare service is one for which the expected health benefits exceed the expected negative consequences by a sufficiently wide margin.¹ Evidence-based information, in conjunction with the clinical expertise of physicians from multiple medical specialties, was used to develop the criteria in order to improve patient care and obtain the best outcomes while considering the subtleties and distinctions necessary in making clinical decisions. To provide the evidence foundation for this AUC, the AAOS Department of Clinical Quality and Value provided the writing panel and voting panel with the AAOS Clinical Practice Guideline on Distal Radius Fracture, which can be accessed via the following link: http://www.orthoguidelines.org/topic?id=1034

The purpose of this AUC is to help determine the appropriateness of clinical practice guideline recommendations for the heterogeneous patient population routinely seen in practice. The best available scientific evidence is synthesized with collective expert opinion on topics where gold standard randomized clinical trials are not available or are inadequately detailed for identifying distinct patient types. When there is evidence corroborated by consensus that expected benefits substantially outweigh potential risks, exclusive of cost, a procedure is determined to be appropriate. The AAOS uses the RAND/UCLA Appropriateness Method (RAM)¹ to assess the appropriateness of a particular treatment. This process includes reviewing the results of the evidence analysis, compiling a list of clinical vignettes, and having an expert panel comprised of representatives from multiple medical specialties to determine the appropriateness of each of the clinical indications for treatment as "Appropriate," "May be Appropriate," or "Rarely Appropriate." To access a more user-friendly version of the appropriate use criteria for this topic online, please visit our AUC web-based application at <u>www.orthoguidelines.org/auc</u> or download the OrthoGuidelines app from Google Play or Apple Store.

These criteria should not be construed as including all indications or excluding indications reasonably directed to obtaining the same results. The criteria intend to address the most common clinical scenarios facing general pediatricians and other qualified physicians managing patients with DRF. The ultimate judgment regarding any specific criteria should address all circumstances presented by the patient and the needs and resources particular to the locality or institution. It is also important to state that these criteria and are not meant to supersede clinician expertise and experience or patient preference.

INTERPRETTING THE APPROPRIATENESS RATING

To prevent misuse of these criteria, it is extremely important that the user of this document understands how to interpret the appropriateness ratings. The appropriateness rating scale ranges from one to nine and there are three main range categories that determine how the median rating is defined (i.e. 1-3 = "Rarely Appropriate", 4-6 = "May Be Appropriate", and 7-9 = "Appropriate"). Before these AUCs are consulted, the user should read through and understand all contents of this document.

INCIDENCE

Distal radius fracture is one of the most common fractures seen by orthopaedic surgeons with an incidence of 195.2/100,000 persons per year.²

ETIOLOGY

Distal radius fractures occur as a result of both high energy and low energy trauma. There is a bimodal distribution of distal radius fractures where high-energy fractures occur in younger persons (predominately male) and high and low-energy fractures occur in older persons (predominately female).^{2,3}

POTENTIAL BENEFITS, HARMS, AND CONTRAINDICATIONS

The aim of treatment is pain relief and return of function while weighing the risks and benefits of nonoperative and operative treatment. Therefore, an open shared decision-making process should be undertaken that includes available treatments and their respective risks and benefits, in the setting of the values and preferences of the individual patient (patient centered care).⁴

II.METHODS

This AUC for Distal Radius Fracture is based on a review of the available literature and a list of clinical scenarios (i.e. criteria) constructed and voted on by experts in orthopaedic surgery and other relevant medical fields. This section describes the methods adapted from RAM¹. This section also includes the activities and compositions of the various panels that developed, defined, reviewed, and voted on the criteria.

Two panels participated in the development of the Distal Radius Fracture AUC, a writing panel and a voting panel. Members of the writing panel developed a list of patient scenarios and relevant treatment options. Additional detail on how the writing panel developed the patient scenarios and treatments is below. The voting panel participated in two rounds of voting. During the first round, the voting panel was given approximately one month to independently rate the appropriateness of each the provided treatments for each of the relevant patient scenarios as 'Appropriate', 'May Be Appropriate', or 'Rarely Appropriate' via an electronic ballot. How the voting panel rates for appropriateness is described in more detailed below. After the first round of voting/appropriateness ratings were submitted, AAOS staff calculated the median ratings for each patient scenario and specific treatment. A virtual voting panel meeting was held on Saturday, June 5, 2021. During this meeting voting panel members addressed the scenarios/treatments which resulted in disagreement from round one voting. The voting panel members discussed the list of assumptions, patient indications, and treatments to identify areas that needed to be clarified/edited. After the discussion and subsequent changes, the group was asked to rerate their first-round ratings during the voting panel meeting, only if they were persuaded to do so by the discussion and available evidence. There was no attempt to obtain consensus about appropriateness.

The AAOS Committee on Evidence Based Quality and Value, the AAOS Research and Quality Council, and the AAOS Board of Directors sequentially approve all AAOS AUCs.

DEVELOPING CRITERIA

Panel members of the AUC developed patient scenarios using the following guiding principles: 1) Comprehensive – Covers a wide range of patients.

2) Mutually Exclusive - There should be no overlap between patient scenarios/indications.

3) Homogenous – The final ratings should result in equal application within each of the patient scenarios.

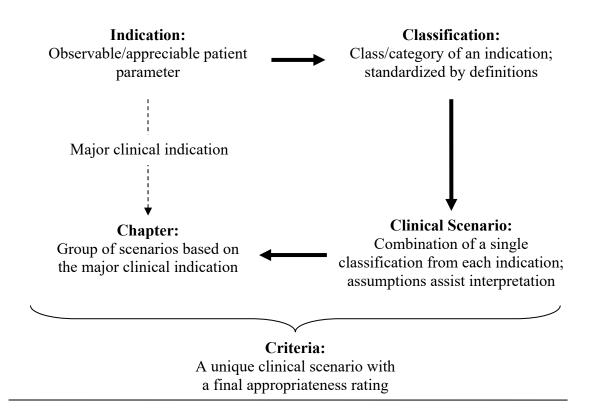
4) Manageable – Number of total voting items (i.e. # of patient scenarios x # of treatments) should be practical for the voting panel. Target number of total voting items = 2000-3000. This means that not all patient indications and treatments can be assessed within one AUC.

The writing panel developed the scenarios by categorizing patients in terms of indications evident during the clinical decision-making process. These scenarios relied upon definitions and general assumptions, mutually agreed upon by the writing panel during the development of the scenarios. These definitions and assumptions were necessary to provide consistency in the interpretation of the clinical scenarios among experts voting on the scenarios, and readers using the final criteria.

FORMULATING INDICATIONS AND SCENARIOS

The AUC writing panel began the development of the scenarios by identifying clinical indications typical of patients with distal radius fracture in clinical practice. Indications are most often parameters observable by the clinician, including symptoms or results of diagnostic tests. Additionally, "human factors" (e.g. activity level) or demographic variables can be considered.

Figure 1. Developing Criteria



Indications identified in clinical trials, derived from patient selection criteria, and/or included in AAOS Clinical Practice Guidelines⁵ (<u>http://www.orthoguidelines.org</u>) served as a starting point for the writing panel, as well as ensured that these AUCs referenced the evidence base for this topic. The writing panel considered this initial list and other indications based on their clinical expertise and selected the most clinically relevant indications. The writing panel then defined distinct classes for each indication to stratify/categorize the indication.

The writing panel organized these indications into a matrix of clinical scenarios that addressed all combinations of the classifications. The writing panel was given the opportunity to remove any scenarios that rarely occur in clinical practice but agreed that all scenarios were clinically relevant. The major clinical decision-making indications chosen by the writing panel divided the matrix of clinical scenarios into chapters, as follows: AO/OTA Fracture Type, Mechanism of Injury, Pre-Injury Activity Level of Patient, Patient Health, and Other Injuries.

CREATING DEFINITIONS AND ASSUMPTIONS

The Distal Radius Fracture AUC writing panel constructed concise and explicit definitions for the indications and classifications. This standardization helps ensure that the way the writing panel defined the patient indications is consistent among those reading the clinical scenario matrix or the final criteria. Definitions create explicit boundaries when possible and are based on standard medical practice or existing literature.

Additionally, the writing panel formulated a list of general assumptions in order to provide more consistent interpretations of a scenario. These assumptions differed from definitions in that they identified circumstances that exist outside of the control of the clinical decision-making process. Assumptions also address the use of existing published literature regarding the effectiveness of treatment and/or the procedural skill level of physicians. Assumptions also highlight intrinsic methods described in this document such as the role of cost considerations in rating appropriateness, or the validity of the definition of appropriateness. The main goal of assumptions is to focus scenarios so that they apply to the average patient presenting to an average physician at an average facility.

The definitions and assumptions should provide all readers with a common starting point in interpreting the clinical scenarios. The list of definitions and assumptions accompanied the matrix of clinical scenarios in all stages of AUC development and the final list appears below in the "Patient Indications and Treatments" section of this document.

LITERATURE REVIEW

The Clinical Practice Guideline on Management of Distal Radius Fracture², was used as the evidence base for this AUC (see here: <u>https://www.orthoguidelines.org</u>). This guideline helped to inform the decisions of the writing panel and voting panel where available and necessary.

VOTING PANEL MODIFICATIONS TO WRITING PANEL DOCUMENT

At the start of the in-person voting panel meeting, the voting panel was reminded that they can amend the original writing panel materials if the amendments resulted in more clinically relevant and practical criteria. To amend the original materials, instructed voting panel member must make a motion to amend and another member must "second" that motion, after which a vote is conducted. If the majority of voting panel members voted "yes" to amend the original materials, the amendments were accepted.

DETERMINING APPROPRIATENESS

Voting Panel

As mentioned above, a multidisciplinary panel of clinicians was assembled to determine the appropriateness of treatments for the Distal Radius Fracture AUC. A non-voting moderator, who is an orthopaedic surgeon, but is not a specialist in the management of Distal Radius Fracture, moderated the voting panel. The moderator was familiar with the methods and procedures of AAOS Appropriate Use Criteria and led the panel (as a non-voter) in discussions. Additionally, no member of the voting panel was involved in the development, i.e. writing panel, of the scenarios.

The voting panel used a modified Delphi procedure to determine appropriateness ratings. The voting panel participated in two rounds of voting while considering evidence-based information provided in the literature review.

Rating Appropriateness

When rating the appropriateness of a scenario, the voting panel considered the following definition:

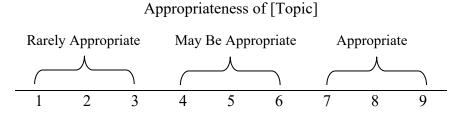
"An appropriate procedural step for a patient with distal radius fracture is one for which the procedure is generally acceptable, is a reasonable approach for the indication, and is likely to improve the patient's health outcomes or survival."

The voting panel rated each scenario using their best clinical judgment, taking into consideration the available evidence, for an average patient presenting to an average physician at an average facility as follows:

Figure 2.	Interpreting the 9-	Point Appropriateness Scale
-----------	---------------------	-----------------------------

Rating	Explanation	
7-9	Appropriate: Appropriate for the indication provided, meaning treatment is generally acceptable and is a reasonable approach for the indication and is likely to improve the patient's health outcomes or survival.	
4-6	May Be Appropriate: Uncertain for the indication provided, meaning treatment may be acceptable and may be a reasonable approach for the indication, but with uncertainty implying that more research and/or patient information is needed to further classify the indication.	
1-3	Rarely Appropriate: Rarely an appropriate option for management of patients in this population due to the lack of a clear benefit/risk advantage; rarely an effective option for individual care plans; exceptions should have documentation of the clinical reasons for proceeding with this care option (i.e. procedure is not generally acceptable and is not generally reasonable for the indication).	

Each panelist uses the scale below to record their response for each scenario:



Round One Voting

The first round of voting occurred after approval of the final indications, scenarios, and assumptions by the writing panel. The voting panel rated the scenarios electronically using the AAOS AUC Electronic Ballot Tool, a personalized ballot created by AAOS staff. There was no interaction between voting panel members while completing the first round of voting. Panelists considered the following materials:

- The instructions for rating appropriateness
- The completed literature review, that is appropriately referenced when evidence is available for a scenario
- The list of indications, definitions, and assumptions, to ensure consistency in the interpretation of the clinical scenarios

Round Two Voting

The second round of voting occurred after the voting panel meeting on June 5th, 2021. Prior to the teleconference, each voting panelist received a personalized document that included his/her first-round ratings along with summarized results of the first-round ratings that resulted in disagreement. These results indicated the frequency of ratings for a scenario for all panelists. The document contained no identifying information for other panelists' ratings. The moderator also used a document that summarized the results of the panelists' first round voting. These personalized documents served as the basis for discussions of scenarios which resulted in disagreement.

During the discussion, the voting panel members were allowed to add or edit the assumptions list, patient indications, and/or treatments if clarification was needed. Voting panel members were also able to record a new rating for any scenarios/treatments, if they were persuaded to do so by the discussion and/or the evidence. There was no attempt to obtain consensus among the panel members. After the final ratings were submitted, AAOS staff used the AAOS AUC Electronic Ballot Tool to export the median values and level of agreement for all voting items.

Final Ratings

Using the median value of the second-round ratings, AAOS staff determined the final levels of appropriateness. Disagreement among raters can affect the final rating. Agreement and disagreement were determined using the BIOMED definitions of Agreement and Disagreement, as reported in the RAND/UCLA Appropriate Method User's Manual¹, for a panel of 8-10 voting members (see Figure 3 below). The 8-10 panel member disagreement cutoff was used for this voting panel. For this panel size, disagreement is defined as when \geq 3 members' appropriateness ratings fell within the appropriate (7-9) and rarely appropriate (1-3) ranges for any scenario (i.e. \geq 3 members' ratings fell between 1-3 and \geq 3 members' ratings fell between 7-9 on any given

scenario and its treatment). If there is still disagreement in the voting panel ratings after the last round of voting, that voting item is labeled as "5" regardless of median score. Agreement is defined as ≤ 2 panelists rated outside of the 3-point range containing the median.

	Disagreement	Agreement	
Panel Size Number of panelists rating in each extreme (1-3 and 7-9)		1 0	
8,9,10	\geq 3	≤ 2	
11,12,13	\geq 4	≤ 3	
14,15,16	≥ 5	<u>≤</u> 4	

Figure 3. Defining	Agreement and	Disagreement for	r Appropriateness	Ratings
8 8	U	0	11 1	\mathcal{O}

Adapted from RAM¹

The classifications in the table below determined final levels of appropriateness.

Figure 4. Interpreting Final Ratings of Criteria

Level of Appropriateness	Description
Appropriate	• Median panel rating between 7-9 and no disagreement
May Be Appropriate	 Median panel rating between 4-6 or Median panel rating 1-9 with disagreement
Rarely Appropriate	• Median panel rating between 1-3 and no disagreement

REVISION PLANS

These criteria represent a cross-sectional view of current methods for management of DRF and may become outdated as new evidence becomes available or clinical decision-making indicators are improved. AAOS will update or withdraw these criteria in five years. AAOS will issue updates in accordance with new evidence, changing practice, rapidly emerging treatment options, and new technology.

DISSEMINATING APPROPRIATE USE CRITERIA

OrthoGuidelines

All AAOS AUCs can be accessed via a user-friendly app that is available via the OrthoGuidelines website (<u>www.orthoguidelines.org/auc</u>) or as a native app via the Apple and Google Play stores.

Publication of the AUC document is on the AAOS website at [https://www.aaos.org/quality/quality-programs/upper-extremity-programs/distal-radius-fractures/]. This document provides interested readers with full documentation about the development of Appropriate Use Criteria and further details of the criteria ratings.

AUCs are first announced by an Academy press release and then published on the AAOS website. AUC summaries are published in the *AAOS Now* and the Journal of the American Academy of Orthopaedic Surgeons (JAAOS). In addition, the Academy's Annual Meeting showcases the AUCs on Academy Row and at Scientific Exhibits.

The dissemination efforts of AUC include web-based mobile applications, webinars, and media briefings. In addition, AUCs are also promoted in relevant Continuing Medical Education (CME) courses and distributed at the AAOS Resource Center.

PATIENT INDICATIONS AND TREATMENTS

Assumptions

- 1. Provisional treatment (e.g. provisional reduction and immobilization) may have been attempted as necessary. The AUC tool is intended to address definitive treatment.
- 2. It is assumed that the patient is appropriately risk stratified and otherwise optimized to undergo surgery.
- 3. An adequate physical exam of the patient has been conducted.
- 4. It assumed that adequate Radiographs have been obtained and examined by the clinician.
- 5. The patient history is available and has been reviewed by the clinician.
- 6. Informed consent has been obtained from the patient or medical decision maker.
- 7. It is assumed that the surgeon is trained and capable of performing all operative techniques
- 8. The fracture is not so complex, and/or the patient's comorbidities or social situation such a factor, as to represent an exception to these scenarios (e.g. C3.3 fracture that might be optimally treated with a distraction plate).
- 9. It is assumed that the surgery, when indicated, will be performed in a timely fashion to allow ideal treatment of the fracture.
- 10. It is assumed the surgeon will perform the surgery in the most appropriate location (i.e., ASC, outpatient, inpatient) based on the health of the patient and other injuries rather the nature of the fracture. Open fractures and associated injuries may dictate that surgery should be inpatient.
- 11. The facility has each type of implant/equipment available and capable support personnel.
- 12. Median Neuropathy will be addressed appropriately (i.e. carpal tunnel release as indicated)

Indications

AO/OTA Fracture Type

- 1. Type A AO/OTA Fracture
- 2. Type B AO/OTA Fracture
- 3. Type C AO/OTA Fracture

Mechanism of Injury

- 1. High-energy Fracture
- 2. Low-energy Fracture

Pre-Injury Activity Level of Patient

- 1. High Functional Activity- Patients experiencing substantial stress/strain on their wrist on regular basis (e.g., high-level athletics, heavy labor jobs)
- 2. Normal Independent Activity- Completes activities of daily living without assistance.
- 3. Normal Dependent Activity- Completes activities of daily living with assistance (e.g. crutches/walker and assisted devices)
- 4. Low Functional Activity- Patients experiencing no stress/strain on their wrist on regular basis (e.g. sedentary or assisted living)

Patient Health

- 1. ASA 1-2
- 2. ASA 3-4

Other Injuries (in addition to distal radius fracture)

- 1. Median Neuropathy
- 2. Gustilo Anderson Type I or II Open Fracture
- 3. Gustilo Anderson Type III Open Fracture
- 4. Other Multi-trauma Injury
- 5. No associated injuries

Treatments

- 1. Spanning External Fixation
- 2. Percutaneous Pinning
- 3. Dorsal Spanning Bridge/Wrist Plate
- 4. Volar Locking Plate
- 5. Dorsal Plate
- 6. Fragment Specific Fixation
- 7. Intramedullary Nail
- 8. Immobilization without reduction
- 9. Reduction and Immobilization

III. RESULTS OF APPROPRIATENESS RATINGS

For a user-friendly version of these appropriate use criteria, please access our AUC web-based application at <u>www.orthoguidelines.org/auc</u>. The OrthoGuidelines native app can also be downloaded via the Apple or Google Play stores.

INDICATION PROFILE PROCEDURE RECOMMENDATIONS ÷ i AO/OTA Fracture Type Volar Locking Plate Type A AO/OTA Fracture 8 O Type B AO/OTA Fracture O Type C AO/OTA Fracture Dorsal Plate Mechanism of Injury 7 O High-energy Fracture **Fragment Specific Fixation** Low-energy Fracture 7 Pre-Injury Activity Level of Patient High Functional Activity Reduction and Immobilization O Normal Independent Activity 4 Normal Dependent Activity Low Functional Activity Percutaneous Pinning Patient Health 6 ASA 1-2-3 Spanning External Fixation O ASA 4 5 Other Injuries (in addition to distal radius fracture) ÷ O Median Neuropathy Dorsal Spanning Bidge/Wrist Plate 1 O Gustilo Anderson Type I or II Open Fracture 5 O Gustilo Anderson Type III Open Fracture O Other Multi-trauma Injury Intramedullary Nail No associated injuries 6 Submit 🔁 ÷ Immobilization without reduction 22 1

Web-Based AUC Application Snapshot

RESULTS

The following Appropriate Use Criteria tables contain the final appropriateness ratings assigned by the members of the voting panel. Patient characteristics are found under the column titled "Scenario". The Appropriate Use Criteria for each patient scenario can be found within each of the treatment rows. These criteria are formatted by appropriateness, median rating, and + or indicating agreement or disagreement amongst the voting panel, respectively.

Out of 2,160 total voting items, 888 (41%) voting items were rated as "Appropriate", 734 (34%) voting items were rated as "May Be Appropriate", and 538 (25%) voting items were rated as "Rarely Appropriate" (Figure 5). Additionally, the voting panel members were in statistical agreement on 774 (36%) voting items with 44 (2%) statistical disagreement voting items (Figure 6).

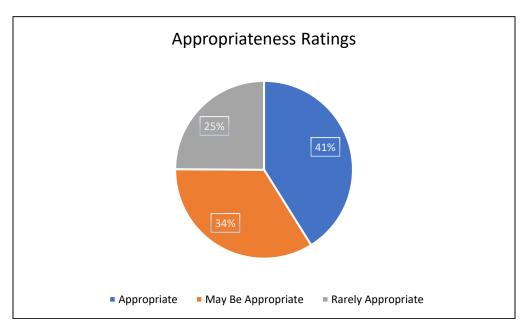
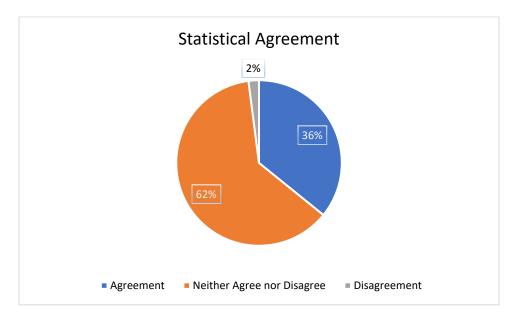
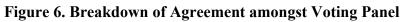


Figure 5. Breakdown of Appropriateness Ratings





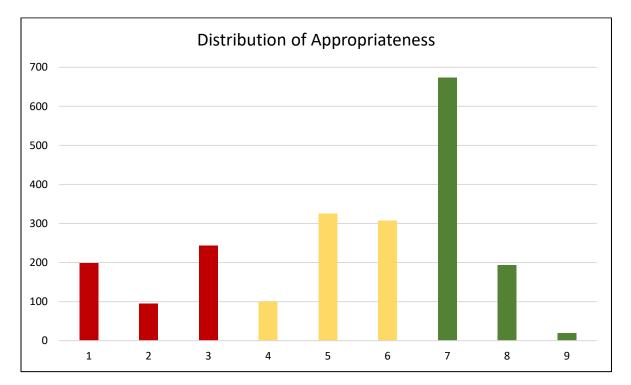


Figure 7. Distribution of Appropriateness on 9-Point Rating Scale

Voting Results by Scenario

Interpreting the AUC tables:

Each procedure contains the appropriateness (i.e. appropriate, may be appropriate, or rarely appropriate) for each patient scenario, followed by the median panel rating, and the panel's agreement represented by "+", or disagreement represented by "-", in parentheses.

Scenario 1:	Treatment	Appropriateness Rating
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (4)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 2:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 3:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (1, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)

	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 4:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 5:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (4)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 6:	Treatment	•••••
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate $(7, +)$
	Volar Locking Plate Dorsal Plate	Appropriate (7, +) May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate (5)

Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 8:	Treatment	indy De Appropriate (5)
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 9:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 10:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (6, +)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (4)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 11:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 12:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	Appropriate (7)
Scenario 13:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 14:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	Appropriate (7)
Scenario 15:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (4)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 16:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 17:	Treatment	

Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 18:	Treatment	• • • • • • • •
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 19:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 20:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5)

	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5-)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 21:	Treatment	• • • • • • • • •
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 22:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 23:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 24:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 25:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Appropriate (7)
Scenario 26:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 27:	Treatment	

	Reduction and Immobilization	May Be Appropriate (5-)
Scenario 30: Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Intramedullary Nail	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Percutaneous Pinning	May Be Appropriate (6)
	Reduction and Immobilization	May Be Appropriate (5-)
Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 29:	Treatment	
	Intramedullary Nail	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Percutaneous Pinning	Appropriate (7)
	Reduction and Immobilization	May Be Appropriate (4)
Scenario 28: Type A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	I reatment Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 28.	Treatment	
	Intramedullary Nail	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Percutaneous Pinning	May Be Appropriate (4) May Be Appropriate (6)
ASA 4, Gustilo Anderson Type I or II Open Fracture	Reduction and Immobilization	May Be Appropriate (4)
Fype A AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity,	Immobilization without reduction	Rarely Appropriate (2, +)

	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 31:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 32: Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 33:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate $(7, +)$

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 34:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 35:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Appropriate (7)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 36:	Treatment	
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 37:	Treatment	

Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 38.	Treatment	5 11 1 (-)
Scenario 38: Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 39:	Treatment	5 11 1 (-)
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 40:	Treatment	· • • • • • • • • • • • • • • • • • • •
Type A AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2)
	Reduction and Immobilization	Appropriate (7)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 41:	Treatment	•
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 42:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (1, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 43:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate $(7, +)$

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 44:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 45:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 46:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate $(5, +)$
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 47:	Treatment	

Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (6, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 48:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 49:	Treatment	5 11 1 ()
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7, +)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 50:	Treatment	· • • • • • · · · · · · · · · · · · · ·
Type A AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (6)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (6)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 51:	Treatment	J 11 1 (-)
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 52: Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 53:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 54:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Appropriate (7)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 55:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Appropriate (7)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 56:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 57:	Treatment	

Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	Appropriate (7)
Scenario 58.	Treatment	
Scenario 58: Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	$\frac{1}{1}$ Appropriate (7, +)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 59:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Appropriate (7)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	Appropriate (7)
Scenario 60:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Appropriate (7)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 61:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 62:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 63:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 64:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 65:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 66:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7, +)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 67:	Treatment	

	Reduction and Immobilization	Appropriate (8)
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 70:	Treatment	
	Intramedullary Nail	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate (6)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Percutaneous Pinning	Appropriate (7, +)
ASA 4, Other Multi-trauma Injury	Reduction and Immobilization	Appropriate (8)
Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity,	Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 69:	Treatment	
	Intramedullary Nail	May Be Appropriate (5)
	Fragment Specific Fixation	May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate $(6, +)$
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Spanning External Fixation	Appropriate $(7, +)$
	Percutaneous Pinning	Appropriate (7, +)
	Reduction and Immobilization	Rarely Appropriate (2)
Scenario 68: Type A AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
		May be Appropriate (3)
	Fragment Specific Fixation Intramedullary Nail	May Be Appropriate (5, +) May Be Appropriate (5)
	Dorsal Plate	May Be Appropriate $(6, +)$
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Percutaneous Pinning	Appropriate $(7, +)$
	Reduction and Immobilization	May Be Appropriate (4)
Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture		
Type A AO/OTA Fracture, Low-energy	Immobilization without reduction	Rarely Appropriate (2, +)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate $(5, +)$
	Intramedullary Nail	May Be Appropriate (5)
Scenario 71:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 72:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 73:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	May Be Appropriate (6)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5-)
Scenario 74:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 75:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5-)
	Percutaneous Pinning	Appropriate (7, +)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 76:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 77:	Treatment	

Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 78:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (6)
Scenario 79:	Treatment	
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Appropriate (7)
	Percutaneous Pinning	Appropriate (7, +)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 80:	Treatment	· · · · · · · · · · · · · · · · · · ·
Type A AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	May Be Appropriate (4)
	Reduction and Immobilization	Appropriate (8, +)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5-)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	May Be Appropriate (5)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 81:	Treatment	•
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 82:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate $(9, +)$
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 83:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 84:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 85:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5, +)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6, +)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 86:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 87:	Treatment	

Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate $(7, +)$
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 88:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 89:	Treatment	(c)
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 90:	Treatment	· • • · ·
Type B AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate $(7, +)$
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 91:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 92:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 93:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Dorsal Spanning Bridge/ wrist Plate	

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 94:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 95:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 96:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 97:	Treatment	

Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 98:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 99:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 100: Type B AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 101:	Treatment	J II I (-)
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate $(8, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 102: Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 103:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 104:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 105:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 106:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 107:	Treatment	

Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 108:	Treatment	
Scenario 108: Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 109:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 110:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 111:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 112:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 113:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 114:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 115:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 116:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 117:	Treatment	

Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 118:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 119:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 120:	Treatment	
Type B AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	May Be Appropriate (4)
Scenario 121:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (1, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 122:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 123:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)

	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 124:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 125:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5, +)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5, +)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate $(8, +)$
	Intramedullary Nail	May Be Appropriate (4)
Scenario 126:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 127:	Treatment	

Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
S		Karely Appropriate (5)
Scenario 128: Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 129:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 130:	Treatment	Ξ
Type B AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 131:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 132:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 133:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 134:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 135:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (8, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 136:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 137:	Treatment	

Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 138:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 139:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 140:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 141:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 142:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 143:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(2, +)$
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 144:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 145:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 146:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 147:	Treatment	

Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 148:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 149:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 150: Type B AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 151:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 152:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 153:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 154:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (6)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 155:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 156:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 157:	Treatment	

Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 158:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 159:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (6)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 160:	Treatment	
Type B AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)

	Percutaneous Pinning	Appropriate (7)
	Spanning External Fixation	May Be Appropriate (5)
	Dorsal Spanning Bridge/Wrist Plate	May Be Appropriate (5)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (5)
Scenario 161:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (1, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 162:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (8, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (9)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 163:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (1, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (8, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 164:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 165:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (8)
	Volar Locking Plate	Appropriate (9)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 166:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 167:	Treatment	

Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate $(8, +)$
	Intramedullary Nail	Rarely Appropriate (3)
a · 170		Ralely Appropriate (5)
Scenario 168: Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3, +)
S	•	Ratery Appropriate (3, +)
Scenario 169: Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 170:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)

	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2, +)
Scenario 171:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 172:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 173:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 174:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 175:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 176:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 177:	Treatment	

Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 178:	Treatment	• • • • • • • • • • •
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 179:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 180:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 181:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 182:	Treatment	• • • • • • • • • • • • • • • • • • • •
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (5)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 183:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(2, +)$
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 184:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 185:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 186:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 187:	Treatment	

	Reduction and Immobilization	May Be Appropriate (4)
Scenario 190: Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Treatment Immobilization without reduction	Rarely Appropriate (2, +)
S	Intramedullary Nail	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Spanning External Fixation	Appropriate $(7, +)$
	Percutaneous Pinning	May Be Appropriate (5)
	Reduction and Immobilization	Rarely Appropriate (3)
Type C AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 189:	Treatment	
	Intramedullary Nail	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Spanning External Fixation	Appropriate (7, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Reduction and Immobilization	Rarely Appropriate (3, +)
Гуре С AO/OTA Fracture, High-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open Fracture		Rarely Appropriate (1, +)
Scenario 188:	Treatment Immobilization without reduction	Daraly Appropriate (1 +)
	Intramedullary Nail	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Spanning External Fixation	Appropriate (7, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Reduction and Immobilization	Rarely Appropriate (3, +)
Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture		
Type C AO/OTA Fracture, High-energy	Immobilization without reduction	Rarely Appropriate (2, +)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (8, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	May Be Appropriate (5)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 191:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 192: Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 193:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 194:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 195:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 196:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 197:	Treatment	

Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 198:	Treatment	
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 100:	Treatment	(c)
Scenario 199: Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 200:	Treatment	/
Type C AO/OTA Fracture, High-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (5)

	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 201:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 202:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (9)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 203:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 204:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (9, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 205:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	Rarely Appropriate (3)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (9)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 206:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 207:	Treatment	

Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate $(7, +)$
	Fragment Specific Fixation	Appropriate $(8, +)$
	Intramedullary Nail	Rarely Appropriate (3)
G : 200		Kalery Appropriate (5)
Scenario 208: Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate $(7, +)$
	Dorsal Plate	Appropriate $(7, +)$
	Fragment Specific Fixation	Appropriate $(7, +)$
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 209:	Treatment	Rulery Appropriate (5)
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 210:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, High Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)

	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (8, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 211:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 212: Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 213:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate $(2, +)$
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 214:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 215:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 216:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 217:	Treatment	

Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3, +)
Samaria 219.	Treatment	
Scenario 218: Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7, +)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 219:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3, +)
Scenario 220:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Independent Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)

	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate $(3, +)$
Scenario 221:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (8, +)
	Dorsal Plate	Appropriate $(7, +)$
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 222:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	May Be Appropriate (5)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 223:	Treatment	J II I (-)
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (2, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	Appropriate (7)

	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	May Be Appropriate (4)
Scenario 224:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 225:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 1-2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (8, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 226:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 227:	Treatment	

	Reduction and Immobilization	May Be Appropriate (4)
Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, No associated injuries	Ireatment Immobilization without reduction	Rarely Appropriate (2, +)
Scenario 230:	Intramedullary Nail Treatment	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Spanning External Fixation	Appropriate $(7, +)$
	Percutaneous Pinning	May Be Appropriate (5-)
	Reduction and Immobilization	Rarely Appropriate (3)
Fracture, Normal Dependent Activity, ASA 4, Other Multi-trauma Injury		
Scenario 229: Type C AO/OTA Fracture, Low-energy	Treatment Immobilization without reduction	Rarely Appropriate (2, +)
~	Intramedullary Nail	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate (7, +)
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Spanning External Fixation	Appropriate $(7, +)$
	Percutaneous Pinning	May Be Appropriate (5-)
	Reduction and Immobilization	Rarely Appropriate $(3, +)$
Fracture		D 1 A
Scenario 228: Type C AO/OTA Fracture, Low-energy Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type III Open	Treatment Immobilization without reduction	Rarely Appropriate (1, +)
	Intramedullary Nail	Rarely Appropriate (2)
	Fragment Specific Fixation	Appropriate $(7, +)$
	Dorsal Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Spanning External Fixation	Appropriate (7, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Reduction and Immobilization	May Be Appropriate (4)
Fracture, Normal Dependent Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture		
Type C AO/OTA Fracture, Low-energy	Immobilization without reduction	Rarely Appropriate (1, +)

	Percutaneous Pinning	May Be Appropriate (5)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	Appropriate (7, +)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (2)
Scenario 231:	Treatment	• • • • • • • • • • •
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (8, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 232:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 233:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	May Be Appropriate (6)

	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 234:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (6)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (8, +)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7, +)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 235:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 1- 2-3, No associated injuries	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (4)
	Spanning External Fixation	Appropriate (7)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	Appropriate (8)
	Dorsal Plate	Appropriate (7)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 236:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Median Neuropathy	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 237:	Treatment	

Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type I or II Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate $(7, +)$
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 238:	Treatment	
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Gustilo Anderson Type III Open Fracture	Immobilization without reduction	Rarely Appropriate (1, +)
	Reduction and Immobilization	Rarely Appropriate (3, +)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate $(7, +)$
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 239:	Treatment	Turoly Appropriate (5)
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, Other Multi-trauma Injury	Immobilization without reduction	Rarely Appropriate (2, +)
	Reduction and Immobilization	May Be Appropriate (4)
	Percutaneous Pinning	May Be Appropriate (5-)
	Spanning External Fixation	Appropriate (7, +)
	Dorsal Spanning Bridge/Wrist Plate	Appropriate (7, +)
	Volar Locking Plate	May Be Appropriate (6)
	Dorsal Plate	May Be Appropriate (6)
	Fragment Specific Fixation	Appropriate (7)
	Intramedullary Nail	Rarely Appropriate (3)
Scenario 240:	Treatment	· · · · · · · · · · · · · · · · · · ·
Type C AO/OTA Fracture, Low-energy Fracture, Low Functional Activity, ASA 4, No associated injuries	Immobilization without reduction	Rarely Appropriate (2)
	Reduction and Immobilization	May Be Appropriate (4)

Percutaneous Pinning	May Be Appropriate (5-)
Spanning External Fixation	Appropriate (7, +)
Dorsal Spanning Bridge/Wrist Plate	Appropriate (7)
Volar Locking Plate	May Be Appropriate (6)
Dorsal Plate	May Be Appropriate (6)
Fragment Specific Fixation	May Be Appropriate (6)
Intramedullary Nail	Rarely Appropriate (2)

IV. APPENDICES

APPENDIX A. DOCUMENTATION OF APPROVAL

AAOS BODIES THAT APPROVED THIS APPROPRIATE USE CRITERIA

Evidence-Based Quality and Value Committee: Approved on September 18, 2021 The AAOS Committee on Evidence Based Quality and Value consists of 19 AAOS members. The overall purpose of this committee is to plan, organize, direct, and evaluate initiatives related to Clinical Practice Guidelines and Appropriate Use Criteria.

Council on Research and Quality: Approved on September 24, 2021

To enhance the mission of the AAOS, the Council on Research and Quality promotes the most ethically and scientifically sound basic, clinical, and translational research possible to ensure the future care for patients with musculoskeletal disorders. The Council also serves as the primary resource to educate its members, the public, and public policy makers regarding evidenced-based medical practice, orthopaedic devices and biologics regulatory pathways and standards development, patient safety, occupational health, technology assessment, and other related areas of importance.

Board of Directors: Approved on October 18, 2021 The 17 member AAOS Board of Directors manages the affairs of the AAOS, sets policy, and determines and continually reassesses the Strategic Plan.

APPENDIX B. DISCLOSURE INFORMATION

DRF Writing Panel Member Disclosures

David C Ring, MD, FAAOS

AAOS: Board or committee member (\$0) Member of Bylaws Committee (Self) Clinical Orthopaedics and Related Research: Editorial or governing board (\$5,000) (Self) Journal of Orthopaedic Trauma: Editorial or governing board (\$0) (Self) Premier Healthcare Solutions (funded by Pfizer): Paid consultant (\$2,000) Hourly advice on arthritis education project (Self) Skeletal Dynamics: IP royalties (\$10,000) Royalties for Elbow Device (Self) Wolters Kluwer Health - Lippincott Williams & Wilkins: Publishing royalties, financial or material support (\$958) Up-to-date chapter on de Quervain tendinopathy (Self) Wright Medical Technology, Inc.: IP royalties (\$5,000) Royalties for Elbow Plates (Self)

Nancy Naughton, OTD, OTR/L, CHT

This individual reported nothing to disclose

Kristin Valdes, OTD, OT, CHT

Elsevier: Editorial or governing board (\$0) Journal of Hand Therapy (Self)

Manijeh Berenji, MD, MPH, FACOEM

This individual reported nothing to disclose

Yusef Sayeed, MD, MPH, MEng

This individual reported nothing to disclose

Jason Strelzow, MD, FAAOS

Acumed, LLC: Paid presenter or speaker (\$1,500) Number of Presentations: 3 N/A (Self) Acumed, LLC: Paid consultant (\$3,500) N/A(Self) American Society for Surgery of the Hand: Board or committee member (\$0) N/A (Self) BoneSupport: Paid consultant (\$2,000) BoneSupport (Self) Journal of Hand Surgery - American: Editorial or governing board (\$0) N/A (Self) Orthopaedic Trauma Association: Board or committee member (\$0) N/A (Self) Stryker: Other financial or material support (\$300) N/A (Self) Synthes: Paid consultant (\$3,500) N/A (Self)

Gregory John Della Rocca, MD, PhD, FAAOS, FACS

AAOS: Board or committee member American College of Surgeons: Board or committee member American Orthopaedic Association: Board or committee member AOTrauma: Board or committee member Association of Bone and Joint Surgeons: Board or committee member Geriatric Orthopaedic Surgery and Rehabilitation: Editorial or governing board Journal of Orthopaedic Trauma: Editorial or governing board Mergenet: Stock or stock Options Orthopaedic Trauma Association: Board or committee member The Orthopaedic Implant Company: Stock or stock Options Wright Medical Technology, Inc.: IP royalties"

Tom Hughes, MD

This individual reported nothing to disclose

Mihir Desai, MD, FAAOS

Acumed, LLC: Paid presenter or speaker (\$7,462) Number of Presentations: 6 Sales Rep training, resident and fellows courses (Self) American Society for Surgery of the Hand: Board or committee member (\$0) Axogen: Paid presenter or speaker (\$6,475) Number of Presentations: 4 Axogen (Self)

Julie E Adams, MD, FAAOS

American Association for Hand Surgery: Board or committee member (\$0) (Self) Parlimentarian; bylaws committee American Shoulder and Elbow Surgeons: Board or committee member (\$0) (Family) Committee membership American Society for Surgery of the Hand: Board or committee member (\$0) (Self & Family) Committee membership Arthrex, Inc: IP royalties (\$0) Arthrex, Inc: Paid consultant (\$0) Biomet: IP royalties (\$0) Journal of Hand Surgery - American: Editorial or governing board (\$0) (Self & Family) Sonex: Paid consultant (\$2,000) N/A(Self) Zimmer: IP royalties (\$0) Report: CUS7850

Andrew Nelson, MD, FAAOS Reported amount under \$1k

DRF Voting Panel Member Disclosures

Jennifer Waljee, MD, MPH Reported amount under \$1k

Jeremy Biggs, MD, MSPH This individual reported nothing to disclose

J Mark Melhorn, MD, FAAOS

AAOS: Board or committee member (\$0) ACOEM: Board or committee member (\$0) ACOEM, MDA, ODG, REED Group: Editorial or governing board (\$0) American Association for Hand Surgery: Board or committee member (\$0) American Medical Association Publications: Publishing royalties, financial or material support (\$0) American Society for Surgery of the Hand: Board or committee member (\$0) IAIME: Board or committee member (\$0)

Ryan Harrison, MD, FAAOS

AAOS: Board or committee member (\$0) American Orthopaedic Association: Board or committee member (\$0) Own the Bone Membership Subcommittee Member (Self) Orthopaedic Trauma Association: Board or committee member (\$0)

Peter C Krause, MD, FAAOS

Orthopaedic Trauma Association: Board or committee member (\$0)

Warren C Hammert, MD

American Society for Surgery of the Hand: Board or committee member (\$0) Journal of Hand Surgery - American: Editorial or governing board (\$0)

Meredith Nita Osterman, MD, FAAOS

AM Surgical: Paid presenter or speaker (\$0) Number of Presentations: 0 DePuy, A Johnson & Johnson Company: Paid consultant (\$0)

Amy Moore, MD

Checkpoint Surgical, Inc: Research support (\$0) Research Collaborator, not financially supported (Self)

Andrew Chen, MD

This individual reported nothing to disclose

APPENDIX C. REFERENCES

- 1. Fitch K, Bernstein SJ, Aguilar MD et al. The RAND/UCLA Appropriateness Method User's Manual. Santa Monica, CA: RAND Corporation; 2001.
- 2. Court-Brown, CM., Caesar, B. Epidemiology of adult fractures: A review. Injury. 2006;37(8):691-697.
- 3. Chen, NC., Jupiter, JB. Management of distal radial fractures. J Bone Joint Surg Am. 2007;89(9):2051-2062.
- 4. Shapiro, LM., Eppler, SL., Baker, LC., Harris, AS., Gardner, MJ., Kamal, RN. The usability and feasibility of conjoint analysis to elicit preferences for distal radius fractures in patients 55 years or older. J Hand Surg Am. 2019;44(10):846-852.
- 5. American Academy of Orthopaedic Surgeons/American Society for Surgery of the Hand Management of Distal Radius Fractures Evidence-Based Clinical Practice Guidelines. www.aaos.org/drfcpg Published December 5, 2020.

APPENDIX D. EXTERNAL ENDORSEMENTS

Kaitlyn S. Sevarino, MBA, CAE Director Department of Clinical Quality and Value

Dear Ms. Sevarino,

The American Association for Hand Surgery (AAHS) has voted to endorse the AAOS Appropriate Use Criteria for the Treatment of Distal Radius Fractures. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this appropriate use criteria and reprint our logo in the introductory section of the appropriate use criteria review document.

Sincerely,

Sarah Boardman Executive Director, AAHS 500 Cummings Center, Ste 4400 Beverly, MA 01915 <u>http://handsurgery.org</u> Direct: 978 299 4514 sboardman@prri.com



December 1, 2021

Kaitlyn S. Sevarino, MBA, CAE Director Department of Clinical Quality and Value American Academy of Orthopaedic Surgeons 9400 W. Higgins Road Rosemont, IL 60018

Dear Ms. Sevarino,

The American College of Occupational and Environmental Medicine (ACOEM) has voted to endorse the American Academy of Orthopaedic Surgeons' (AAOS) Appropriate Use Criteria for the Treatment of Distal Radius Fractures. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this appropriate use criteria and reprint our logo in the introductory section of the appropriate use criteria review document.

Thank you again for involving ACOEM members in the Appropriate Use Criteria's Writing and Voting Panels. We look forward to future opportunities to collaborate with AAOS.

Sincerely,

WSICB-

William C. Bruce, MBA, CAE Chief Executive Officer, ACOEM

25 Northwest Point Boulevard, Suite 700 Elk Grove Village, IL 60007 847/818-1800 www.acoem.org



BOARD OF DIRECTORS Michael T. Archdeacon, MD President

Brendan M. Patterson, MD President-Elect

Emil H. Schemitsch, MD 2nd President-Elect

Heather A. Vallier, MD Immediate Past-President

Michael D. McKee, MD 2nd Past President

Thomas F. Higgins, MD Secretary

Hassan R. Mir, MD, MBA Chief Financial Officer

Anna N. Miller, MD Joseph R. Hsu, MD Kyle J. Jeray, MD Members-At-Large

Gerard P. Slobogean, MD Annual Program Chair

BOD Ex-officio Michael J. Gardner, MD Publications Committee Chair

Theodore Miclau III, MD IOTA Steering Committee Chair

Roy Sanders, MD JOT Editor-in-Chief

Emil H. Schemitsch, MD OTA International Editor-in-Chief

Orthopaedic Trauma Association

Education = Research = Advocacy 9400 W. Higgins Road, Suite 305, Rosemont, IL 60018-4975 Phone: (847) 698-1631 = www.ota.org = OTA@ota.org

December 17, 2021

Kaitlyn S. Sevarino, MBA, CAE Director Department of Clinical Quality and Value

Dear Ms. Sevarino,

The OTA Board of Directors has voted to endorse the AAOS Appropriate Use Criteria for the Treatment of Distal Radius Fractures. This endorsement implies permission for the AAOS to officially list our organization as an endorser of this appropriate use criteria and reprint our logo in the introductory section of the appropriate use criteria review document.

Sincerely,

Alaran

Michael T. Archdeacon, MD OTA President